

TRUTONE ELECTRONICS, INC.

14660 Raymer Street • Van Nuys, California 91405
TRiangle 3-5751 STate 6-5313

March 22, 1967

Mr. T. Nelson
P.O. Box V546
Poughkeepsie, N.Y.

Thank you very much for your recent inquiry. In accordance with your request, we take pleasure in enclosing a catalog sheet and price list covering the item in which you are interested together with all the other units of this series. Should you require further information, we would be happy to forward it by return mail.

If there is no distributor of our products in your area, please feel free to place your order direct with the factory. Our records show, however, that the company closest to you handling our products is:

Morris Electronics of Binghamton
195 Water St.
Binghamton, N.Y.

Please make it a point to call on our distributor and ourselves at any time.

Once again, thank you very much for your interest in our products, and we trust to have the pleasure of serving you in the near future.

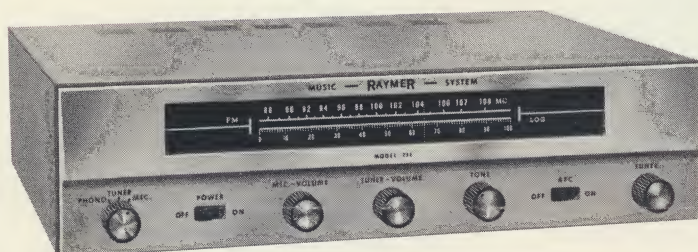
Sincerely yours,

TRUTONE ELECTRONICS, INC.

M. N. Leventhal
Milton N. Leventhal
Sales Manager

MNL:r
Encl.

FM TUNER-AMPLIFIERS WITH MICROPHONE PAGING



MODEL 711
7 WATTS AUDIO



MODEL 3102A
15 WATTS AUDIO

Models 711 and 3102A Background Music and Paging Tuner-Amplifiers are complete High Fidelity Music Systems consisting of an ultra-sensitive FM Tuner complete with AFC, and a self-contained audio amplifier with microphone preamplifier. The Tuner has a special circuit design that guarantees no drifting. In the event that greater audio power is required than that provided by Model 711 or 3102A, provision has been made on the units to connect an external amplifier. Features include a full vision dial, tone control, a volume control for program or phonograph music, a separate volume control for microphone level for paging, and a function switch for source selection. The unit is supplied with a rugged brushed gold aluminum panel and is encased in a sturdy metal cabinet.

Model 711 has speaker output for 8 ohms, 25 volt line, and 70 volt line.

Model 3102A is provided with speaker output for 4, 8, 16 ohms; 25 volt line and 70 volt line.

On Models 711 and 3102A the microphone and the crystal phonograph inputs are high impedance. Where low impedance for microphone is required, use RAYMER Model 311 Microphone Transformer or equivalent.

A special socket is provided on both models for connection to RAYMER Model 310 Remote Control Relay, whenever remote microphone paging is desired.

MODEL 711 SPECIFICATIONS

OUTPUT: 7 watts at less than 2% distortion — **OUTPUT IMPEDANCE:** 8 ohms; 25 volt and 70 volt line — **AMPLIFIER FREQUENCY RESPONSE:** Flat 40-20,000 cycles — **TUNER FREQUENCY RANGE:** 88 to 108 mc — **TUNER FREQUENCY RESPONSE:** 20-20,000 cycles ± 1 db — **TUNER SENSITIVITY:** 2 microvolts — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 1-6GH8, 1-6CB6, 1-6HS6, 1-12AX7, 1-EL84, 2 silicon rectifiers — **POWER CONSUMPTION:** 75 watts, 117 volts AC, 60 cycles — **SIZE:** 13½" x 10⅞" x 3-9/16" — **SHIPPING WEIGHT:** 14 lbs.

MODEL 3102A SPECIFICATIONS

OUTPUT: 15 watts at less than 2% distortion — **OUTPUT IMPEDANCE:** 4, 8, 16 ohms; 25 and 70 volt line — **AMPLIFIER FREQUENCY RESPONSE:** Flat 50-20,000 cycles — **TUNER FREQUENCY RANGE:** 88 to 108 mc — **TUNER FREQUENCY RESPONSE:** 20-20,000 cycles ± 1 db — **TUNER SENSITIVITY:** 2 microvolts — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 2-6DT8, 1-6CB6, 1-6HS6, 1-6AL5, 1-12AX7, 2-ECL86, 1-EZ81 — **POWER CONSUMPTION:** 80 watts, 117 volts AC, 60 cycles — **SIZE:** 13¾" x 8⅜" x 5¼" — **SHIPPING WEIGHT:** 16 lbs.

Distributed by

TRUTONE ELECTRONICS, INC.

14660 Raymer Street • Van Nuys, California

**"NO FATIGUE"
LISTENING**

RAYMER

**LONG-DURATION
UNINTERRUPTED SERVICE**



MODEL 394A AM-FM TUNER-AMPLIFIER

FURNISHED WITH BRUSHED GOLD EXTRUDED ALUMINUM PANEL

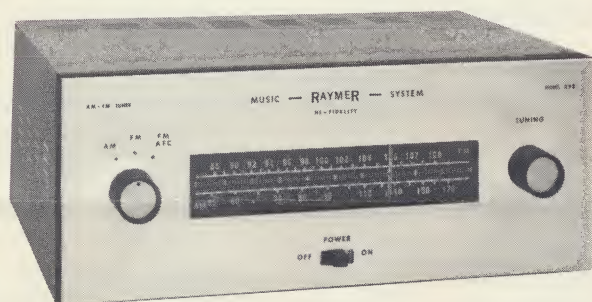
A complete high fidelity music system in a styled compact cabinet. Model 394A Tuner-Amplifier is a high fidelity ultra-sensitive AM-FM Tuner complete with AFC which guarantees no drifting, and a push-pull audio amplifier that can be used in connection with a phonograph pickup. Separate treble and bass controls are furnished for selection of tone most pleasing to the listener. Speaker output for 4, 8, 16 ohms as well as 25 and 70 volt lines. An added feature has been incorporated so that the output of the tuner can be connected to an external amplifier or tape recorder. The unit is supplied with a rugged brushed gold aluminum panel and is encased in a sturdy metal cabinet.

FEATURES:

Smooth flywheel tuning — AFC defeat switch — Illuminated full vision dial — Jack for multiplex adaptation — Additional jack permitting tuner to be used with external amplifier or tape recorder — Built-in line cord antenna for FM, with provision for external antenna — Built-in Hi Q ferrite loop stick antenna for AM reception — Selector switch on front panel permits amplifier to be used with tuner or with external phonograph input.

SPECIFICATIONS

OUTPUT: 15 watts at less than 2% distortion — **OUTPUT IMPEDANCE:** 4, 8, 16 ohms; 25 and 70 volt line — **FREQUENCY RESPONSE** (Amplifier): Flat 40-20,000 cycles — **TUNER FREQUENCY RANGE:** FM, 88 to 108 mc; AM, 510 to 1800 kc — **TUNER FREQUENCY RESPONSE:** FM, 20-20,000 cycles ± 1 db; AM, 5000 cycles ± 3 db — **TUNER SENSITIVITY:** FM, 2 microvolts; AM, 10 microvolts — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 1-6AL5, 1-6BA6, 1-6BE6, 1-6CB6, 2-6DT8, 1-6C4, 2-ECL86, 1-EZ81 — **POWER CONSUMPTION:** 80 watts, 117 volts AC, 60 cycles — **SIZE:** 13 $\frac{3}{4}$ " x 8 $\frac{3}{8}$ " x 5 $\frac{1}{4}$ " — **SHIPPING WEIGHT:** 15 lbs.

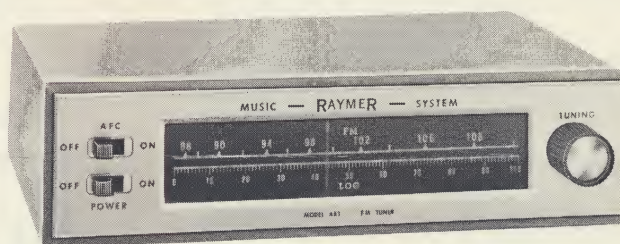


MODEL 392 AM-FM TUNER

Model 392 is a High Fidelity ultra sensitive AM-FM tuner complete with AFC. Special design guarantees no drifting. Smooth flywheel tuning. Illuminated full vision dial. AFC defeat switch. Extra jack for Multiplex adaptation. Convenient AC receptacle on rear of chassis.

SPECIFICATIONS:

FREQUENCY RANGE: AM - 510 to 1800 kc, FM - 88 to 108 mc — **SENSITIVITY:** AM - 10 microvolts, FM - 2 microvolts — **FREQUENCY RESPONSE:** AM - 20-5,000 cycles ± 3 db, FM - 20-20,000 cycles ± 1 db — **ANTENNA INPUT:** AM - Built-in Hi Q Ferrite loopstick, FM - Built-in line cord antenna with provision for external antenna — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 2-6DT8, 1-6CB6, 1-6BA6, 1-6BE6, 1-6AL5, plus silicon rectifier — **POWER CONSUMPTION:** 24 watts, 117 volts AC, 60 cycles — **SIZE (Excluding knobs):** 10 $\frac{7}{8}$ " x 8 $\frac{3}{4}$ " x 4 $\frac{7}{16}$ " — **SHIPPING WEIGHT:** 9 lbs.



MODEL 481 FM TUNER

Model 481 is a High Fidelity ultra sensitive FM tuner complete with AFC. Special design guarantees no drifting. Illuminated full vision dial. AFC defeat switch. Extra jack for Multiplex adaptation.

SPECIFICATIONS:

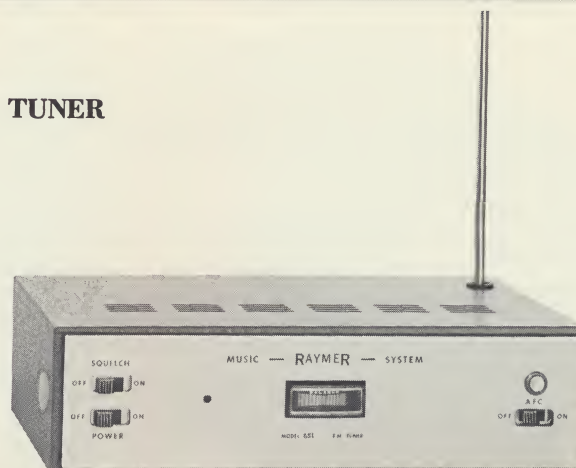
FREQUENCY RANGE: 88 to 108 mc — **SENSITIVITY:** 2 microvolts — **FREQUENCY RESPONSE:** 20-20,000 cycles ± 1 db — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 2-6DT8, 1-6CB6, 1-6HS6, 1-6AL5, plus silicon rectifier — **POWER CONSUMPTION:** 21 watts, 117 volts AC, 60 cycles — **SIZE:** 9 $\frac{1}{2}$ " x 7" x 2 $\frac{15}{16}$ " — **SHIPPING WEIGHT:** 6 lbs.

MODEL 651 FM TUNER

IDEAL FOR USE WITH WIRELESS MICROPHONES,

WIRELESS GUITARS & MUSICAL INSTRUMENTS,

SINGLE FREQUENCY TUNING IN BACKGROUND
MUSIC INSTALLATIONS.



Model 651 is a semi-fixed-frequency tuner designed for use with wireless microphones and wireless musical instruments employing the 88-108 mc band. Its superb performance makes it especially desirable as a fixed frequency tuner in FM background installations in hotels, motels, apartment houses, commercial buildings, etc. Tuning is effected by a screwdriver through a hole on the right side of the cabinet. When Model 651 is used with wireless microphones or wireless musical instruments, its strong and effective limiting assures a uniform output level throughout the functional range just as it minimizes truck and ignition noises. The Tuner's positive squelching automatically silences the audio when the transmitter is turned off or when the signal-to-noise ratio falls below the usable level. When the Tuner is used in FM background music systems, the squelching prevents obnoxious background noises if the station goes off the air. High Fidelity reproduction (20 to 20,000 cycles) makes Model 651 especially applicable for use with wireless musical instruments or as the FM music tuner in background music installations. The Tuner is supplied with a plug-in vertical telescoping antenna and with connections for external antennas of 72 and 300 ohms. The unit is housed in a handsome tan metal cabinet whose compact size permits placing the Tuner anywhere or in any position.

FEATURES

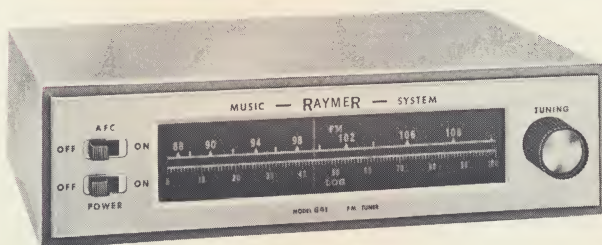
Illuminated center scale tuning meter — Semi-fixed screwdriver tuning adjustment — Bulldog AFC circuitry — AFC on-off switch — Squelch threshold adjustment — Squelch on-off switch — Separate output packs for music or microphone reproduction — Operation indicator light — Detachable telescopic vertical antenna — External antenna impedances of 72 and 300 ohms.

SPECIFICATIONS

FREQUENCY RANGE: 88 to 108 mc — **SENSITIVITY:** 2 microvolts — **FREQUENCY RESPONSE:** 20-20,000 cycles ± 1 db — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 1 - 6GH8A, 3 - 6AU6, 1 silicon power rectifier, 2 germanium signal diodes — **POWER CONSUMPTION:** 21 watts, 117 volts AC, 60 cycles — **SIZE:** 9 1/2" x 7" x 2 5/16" — **SHIPPING WEIGHT:** 6 lbs.

MODEL 651RP FM TUNER

Model 651RP is an FM tuner identical in all characteristics to Model 651 except that it is supplied in a standard rack panel similar in size and appearance to Model 481RP.



SPECIFICATIONS

FREQUENCY RANGE: 88 to 108 mc — **SENSITIVITY:** 2 micro-volts — **FREQUENCY RESPONSE:** 20 to 20,000 cycles ± 1 db — **HUM LEVEL:** 55 db below 100% modulation — **TUBES:** 1 - 6GH8A, 3 - 6AU6, 1 silicon power rectifier, 2 germanium signal diodes — **POWER CONSUMPTION:** 21 watts, 117 volts AC, 60 cycles — **SIZE:** 9 1/2" x 7" x 2 5/16" — **SHIPPING WEIGHT:** 6 lbs.

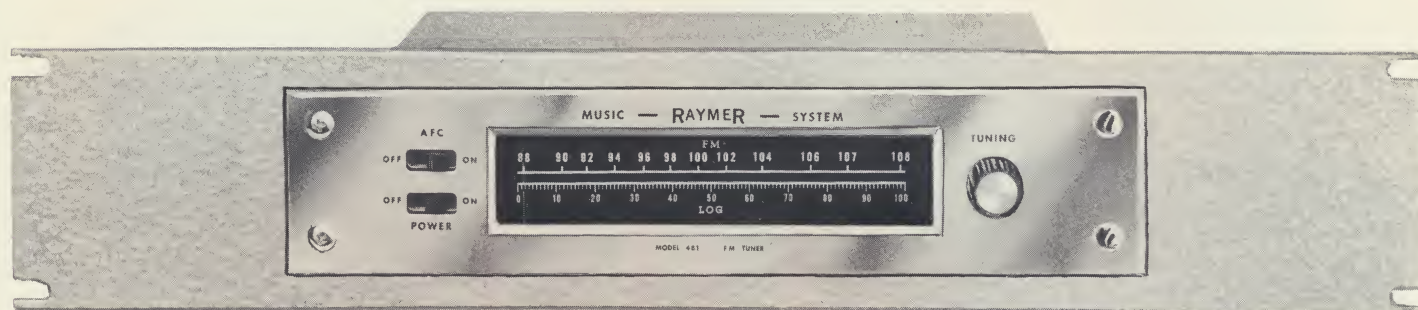
MODEL 641 FM TUNER

Model 641 is a High Fidelity FM Tuner with greater sensitivity than Model 481. It is designed for fringe area reception or for noisy locations where strong and effective limiting are a prime requirement. Its AFC Bulldog circuitry provides positive "no drift" operation 24 hours a day. Model 641 may be used for wireless microphones and wireless guitars where squelching is not required.

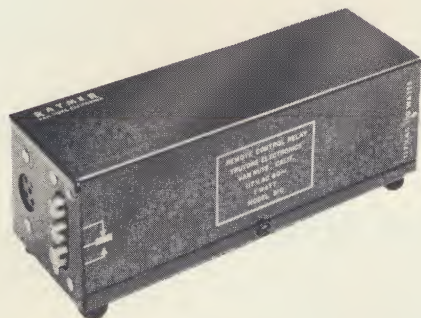
MODEL 641RP FM TUNER

Model 641RP is an FM tuner identical in all characteristics to Model 641 except that it is supplied in a standard rack panel similar in size and appearance to Model 481RP.

MODEL 481RP FM TUNER



Model 481RP is an FM tuner identical in all characteristics to Model 481 except that it is supplied in a standard rack panel (gray hammetone) measuring $3\frac{1}{2}'' \times 19''$. It is furnished with a removable escutcheon so that the panel may be painted a different color to match or harmonize with the color of existing equipment.



MODEL 310 REMOTE CONTROL RELAY

Model 310 Remote Control Relay is a self-powered relay unit designed to silence music automatically while paging, when used in background music and public address systems. May be incorporated in any installation employing a tuner and separate amplifier, without internal modification of either unit. Provided with special 5 prong socket for direct connection (using Type 312 Cable) to RAYMER receivers and other RAYMER components. With slight modification Model 310 may be used to operate remote 110 volt AC appliances or components. Relay switch line operates on 25 volts so as to conform with building and fire codes. Furnished with AC convenience outlet. Ideal for use wherever a single-pole-double-throw relay is required. **POWER CONSUMPTION:** 1 watt, 117 volts AC, 60 cycles. **SIZE:** $7\frac{3}{8}''$ long x $2\frac{1}{2}''$ deep x $2\frac{5}{8}''$ high. **SHIPPING WEIGHT:** $2\frac{1}{2}$ lbs.

MODEL 312 CABLE

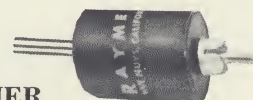
A special cable designed to connect RAYMER 310 Remote Control Relay to RAYMER receivers and other components. Provided with 5 prong plugs on each end. Length 12 inches.



MODEL 4PA40 PUBLIC ADDRESS AMPLIFIER

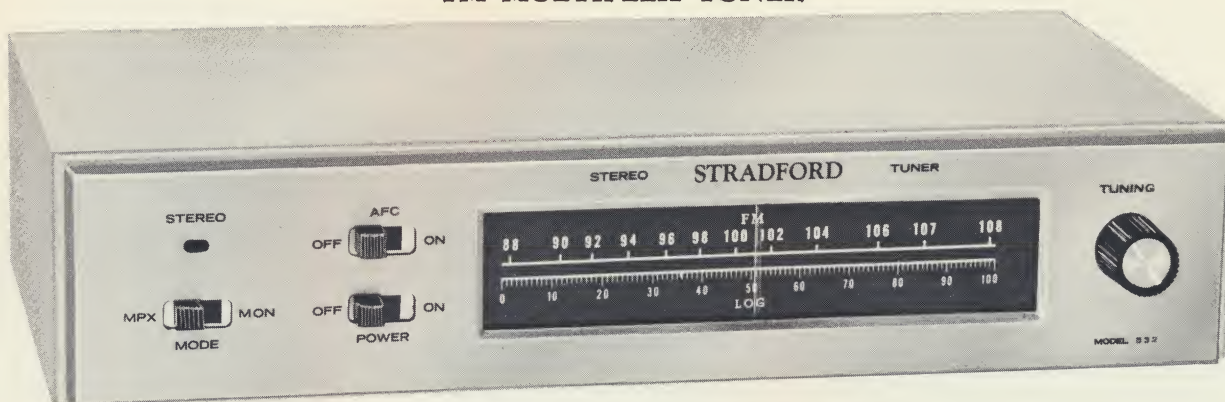
A High Fidelity amplifier with 35 watts output at less than 1% distortion. Ideal for background music and public address installations. Frequency response of 30-30,000 cycles. Bass boost 18 db, Treble boost 18 db. Phono input 70 db gain. Microphone input 110 db gain. Hum 90 db below rated output. Inputs: one radio tuner/Xtal phono; two microphones with Mike 2 convertible to tape head/magnetic cartridge by means of switch on rear panel. Five controls for 2 mikes, 1 radio/phono, bass boost, treble boost. Pilot light. External fuse post. Hum adjustment control. AC receptacle.

OUTPUT IMPEDANCES: 4, 8, 16 ohms; 25 and 70 volt lines — **TUBES:** 4-12AX7, 2-6L6GC, 1-5U4G — **POWER CONSUMPTION:** 140 watts, 117 volts AC, 60 cycles — **SIZE** (excluding knobs): $14\frac{1}{8}'' \times 8\frac{1}{2}'' \times 6\frac{3}{4}''$ high — **SHIPPING WEIGHT:** $17\frac{1}{2}$ lbs.

MODEL 311
MICROPHONE TRANSFORMER

Model 311 is a microphone transformer designed to couple a low impedance microphone to the high impedance microphone input of any amplifier. Small size eliminates installation space problems. Mu-metal shielding reduces hum and extraneous noise pickup, to minimum. Balanced low impedance line. May be used with any type microphone having impedance of 50 to 250 ohms. Ideal for voice frequency operation but also provides acceptable music reproduction. Overall Dimensions: $2\frac{1}{4}''$ long x 1" diameter.

The New **STRADFORD** Model 532
Seven plus Four
FM MULTIPLEX TUNER



THE STRADFORD 532 IS A TRUE HIGH FIDELITY FM STEREO MULTIPLEX TUNER DESIGNED FOR USE WITH ANY HIGH FIDELITY AMPLIFIER SYSTEM.

EVERY DESIRABLE FEATURE IN THIS SEVEN-PLUS-FOUR TUNER!

- Authentic high fidelity reproduction
- Positive-action stereo "beacon" light
- No-drift tuning
- Automatic Frequency Control (AFC) with defeat switch
- Edge-lighted full vision dial
- Pin-point dial calibration
- Linear logging scale
- Stereo-Monaural (Mode) switch
- Special filters to provide off-the-air tape recording without background interference
- Beautiful gold bronze panel in handsome metal cabinet
- Small size — fits anywhere

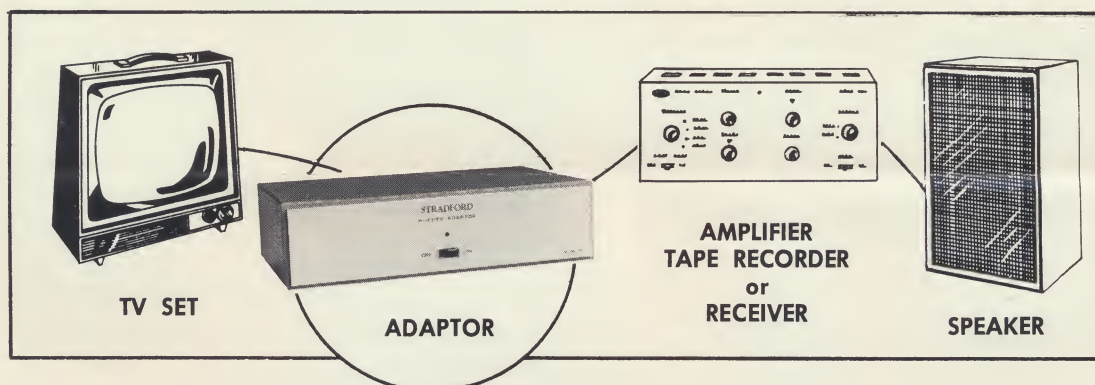
SPECIFICATIONS:

FREQUENCY RANGE: 87½ to 108½ mc.
SENSITIVITY: 2 microvolts.
FREQUENCY RESPONSE (Monaural): 30-20,000 cycles.
HUM LEVEL (Monaural): 55 db below 100% modulation.
HUM AND NOISE LEVEL (Stereo Multiplex): 65 db below full output.
STEREO CHANNEL SEPARATION: 30 db.
AUDIO FREQUENCY RESPONSE (Stereo Multiplex): 15-15,000 cycles ± 1 db.
BAND PASS SUBCARRIER FREQUENCY RESPONSE: 23 kc to 53 kc ± 4 db.
ANTENNA INPUTS: 75 and 300 ohms.
TUBES: 7 solid-state devices, 1-6GH8A, 1-6CB6A, 1-6HS6, 1-6DT8.
POWER CONSUMPTION: 117 volts AC, 60 cycles, 30 watts.
DIMENSIONS: 12⅝" x 7" x 2⅞".
SHIPPING WEIGHT: 9 lbs.

MODEL 480 HIFI-TV ADAPTOR

REPRODUCES

High Fidelity Television Sound from any TV Set



The **STRADFORD Model 480** is a HiFi-TV Adaptor, designed to reproduce television sound in true high fidelity through a HiFi amplifier or receiver without disturbing the wiring of the television receiver or HiFi components.

Television broadcasting stations broadcast in high fidelity. All TV sets receive this sound, but the majority do not reproduce it. The Model 480 Adaptor picks up the HiFi signal in the TV set and feeds it to the amplifier or receiver, after which the HiFi sound is reproduced through the speaker system.

Everyone may now enjoy his favorite television programs in true high fidelity by incorporating the new Model 480 Adaptor with his present HiFi and television equipment.

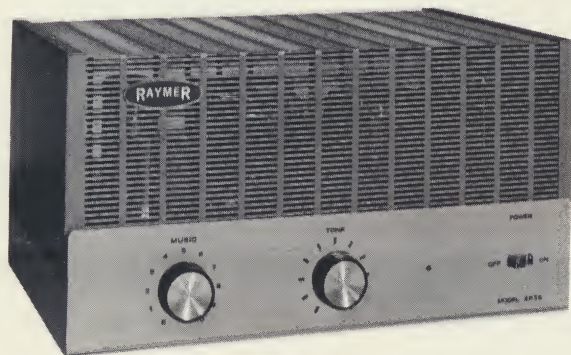
Tape Recording Enthusiasts also may tape programs of their choice with full fidelity. All that is required is to connect the Model 480 Adaptor to the TV set and to the recording input of the tape machine.

The Adaptor is supplied with a tube clamp attached to the end of a 6 ft. insulated wire. The clamp is placed around the glass of the sound detector tube in the TV receiver, picking up true high fidelity sound. The other end of the wire is then connected to the Adaptor. A patch cord furnished with the Adaptor is then connected to the auxiliary input of the amplifier or receiver or to the recording input of a tape machine. Either the wire or patch cord may be extended to desired length without loss of fidelity. The Model 480 may be placed at the TV set or at the amplifier or tape recorder. The unit has been pre-set at the factory and no adjustment is required.

The **Stradford Model 480** is manufactured specially for those who desire the same true high fidelity from their TV sets as from their HiFi system.

Easily Installed With Only a Screwdriver.

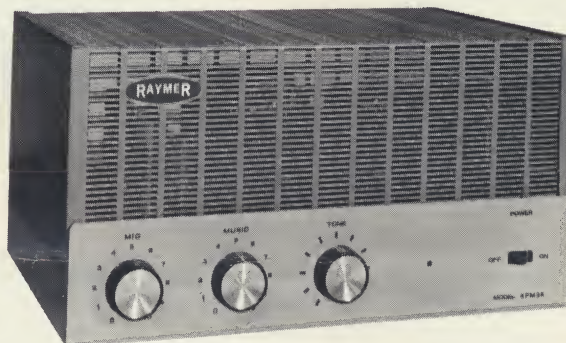
CONTINUOUS DUTY AMPLIFIERS FOR BACKGROUND MUSIC AND PUBLIC ADDRESS

**MODEL 4P35 MUSIC AMPLIFIER**

A High Fidelity Amplifier with 35 watts output at 1% distortion. Ideal for background music installations. Superb for use as booster amplifier with public address or background music systems. Frequency response of 30-30,000 cycles. 70 db gain. Hum 70 db below rated output. High impedance input for tuner, Xtal phono, or auxiliary equipment. Tone control. Pilot light. External fuse post. AC receptacle. Perforated cover for maximum ventilation.

SPECIFICATIONS

OUTPUT IMPEDANCES: 4, 8, 16 ohms; 25 and 70 volt lines — **TUBES:** 1 - 12AX7, 2 - 6L6GC, 1 - 5U4GB — **POWER CONSUMPTION:** 120 Watts, 117 Volts AC, 60 Cycles — **SIZE:** 12 $\frac{3}{8}$ " x 8" x 6 $\frac{5}{8}$ " high — **SHIPPING WEIGHT:** 16 lbs.

**MODEL 4PM35 P.A.-PAGING-MUSIC AMPLIFIER**

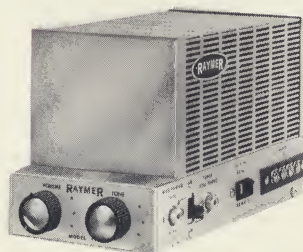
A High Fidelity Amplifier with 35 watts output at 1% distortion. Ideal for background music and public address installations. Circuit designed to permit microphone paging to override music. Frequency response of 30-30,000 cycles. Phono input 70 db gain. Microphone input 110 db gain. Hum 70 db below rated output. Inputs: one radio tuner/Xtal phono; one microphone. Separate volume controls. Tone control. Special socket for connection to Raymer 310 Remote Control Relay, whenever automatic suspension of music is desired while paging. Pilot light. External fuse post. AC receptacle. Perforated cover for maximum ventilation.

SPECIFICATIONS

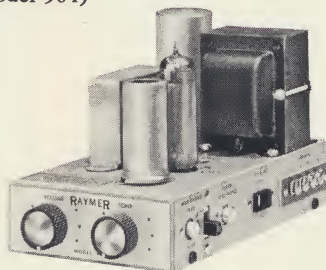
OUTPUT IMPEDANCES: 4, 8, 16 ohms; 25 and 70 volt lines. **TUBES:** 2 - 12AX7, 2 - 6L6GC, 1 - 5U4GB — **POWER CONSUMPTION:** 122 watts, 117 volts AC, 60 cycles — **SIZE:** 12 $\frac{3}{8}$ " x 8" x 6 $\frac{5}{8}$ " high — **SHIPPING WEIGHT:** 16 lbs.

MODEL 4P5 HIGH QUALITY LOW POWER MONAURAL AMPLIFIER

(Replaces Model 904)



(with cover)



(less cover)

Excellent for paging, background music, public address, stereo conversion. Output 5 Watts with low distortion to an 8 ohm speaker or a 25 or 70 volt line. Has two inputs with a switch arrangement for mike, tape, magnetic phono, radio tuner, or a crystal phono. Hum balance control, and convenience AC outlet. Volume control with on-off switch and tone control. Perforated cover available as accessory.

SPECIFICATIONS:

TUBES: 1-12AX7, 1-EL84, 2 silicon rectifiers — **OUTPUT IMPEDANCE:** 8 ohms, 25 and 70 volt line — **POWER CONSUMPTION:** 38 watts, 117 volts AC, 60 cycles — **SIZE:** 4 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ " x 4 $\frac{1}{4}$ " — **SHIPPING WEIGHT:** 6 lbs.